

H. Cho

FILE

clst TSD only



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RECEIVED
JUN 15 1990
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA REGION V

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317/232-8603

US EPA RECORDS CENTER REGION 5



1007438

June 13, 1990

VIA CERTIFIED MAIL - P124-437-335

Mr. S.S. Waldo, Director
Environmental Affairs
Amphenol Corporation
358 Hall Avenue
P.O. Box 304
Wallingford, Connecticut 06492-0384

Re: Certification of Closure
Amphenol (Bendix)
Franklin, Indiana
IND 044587848

Dear Mr. Waldo:

The Indiana Department of Environmental Management (IDEM) has received your certification dated April 2, 1990, that total closure has been completed as outlined in the approved closure plan. With the receipt of this certification, total closure is complete as required by 329 IAC 3-21.

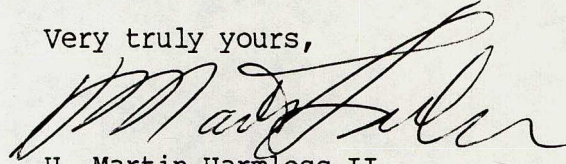
Bendix originally notified the U.S. Environmental Protection Agency, Region V, as a hazardous waste generator and TSD (tank and container storage). With the completion of closure, tank and container storage of hazardous waste has been eliminated. The facility has been purchased by Franklin Power Products Inc., who has notified as a generator only.

This is also to notify you that your facility is no longer required by 329 IAC 3-22-4 to maintain financial assurance for the closure of your facility.

Mr. S.S. Waldo
Page 2

If you have any questions concerning this matter, please contact
Mr. John P. Maher of the Plan Review and Permit Section at AC 317/232-4534.

Very truly yours,



H. Martin Harmless II
Assistant Commissioner
Office of Solid and Hazardous Waste

JPM/go

cc: Mr. Hak Cho, U.S. EPA, Region V
Ms. Fayola Wright, U.S. EPA, Region V
Mr. Jeff Stevens
Ms. Jenny Dooley
Johnson County Health Department
- Franklin Power Products
Ms. Glynda Oakes



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317/232-8603

VIA CERTIFIED MAIL - P730-169-907

December 13, 1989

Mr. Samuel S. Waldo
Amphenol Corporation
P.O. Box 384
Wallingforel, Connecticut 06492-0384

Re: Closure Extension
Amphenol
Franklin, Indiana
IND 044587848

Dear Mr. Waldo:

The Indiana Department of Environmental Management (IDEM) has received your November 7, 1989, request for an extension of time to complete closure activities and certify closure. The additional time is necessary to allow for the pad to be decontaminated again.

An additional one hundred eighty (180) days to complete closure activities is hereby granted. All closure activities must be completed by March 31, 1990. Closure certification must be submitted within sixty (60) days of closure completion.

At an October 27, 1989, meeting with Mr. Mike Bramblett of ATEC, it was agreed that the latest pad decontamination was not adequate. The analysis of the rinsate revealed concentrations above the clean levels stated in the approved closure plan. If the analysis of the rinsate from the next decontamination procedure also reveal concentrations above clean levels, then this agency will consider modifying the approved closure plan.

Please contact Mr. John P. Maher of the Plan Review and Permit Section at 317/232-4534 if you have any questions concerning this matter.

Very truly yours,

Victor P. Windle

Victor P. Windle, Chief
Plan Review and Permit Section
Hazardous Waste Branch
Solid and Hazardous Waste Management

JPM/ssh

cc: Mr. Hak Cho, U.S. EPA, Region V
Ms. Fayola Wright, U.S. EPA, Region V
Mr. Marc Herdrich

An Equal Opportunity Employer



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

~~XX~~

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

VIA CERTIFIED MAIL - P652-575-127

March 31, 1989

Mr. S. S. Waldo, Director
Environmental Affairs
Amphenol Corporation
358 Hall Avenue
P.O. Box 304
Wallingford, Connecticut 06492-0384

Re: Modified Closure Plan
Amphenol (Bendix)
Franklin, Indiana
IND 044587848

Dear Mr. Waldo:

The total closure plan dated August 10, 1987, and as amended on March 13, 1989, for Amphenol's container storage (S01) and tank storage (S02) has been approved with the attached modifications.

A public notice of the closure plan was published in the Daily Journal. The public comment period began on the date of publication, November 19, 1987, and ended on December 19, 1987. No comments were received.

Applicable closure activities must be completed in accordance with the approved plan within one hundred eighty (180) days after the date of this approval letter. When closure is completed, the owner or operator must submit to the Commissioner certification in accordance with 329 IAC 3-34-2(d) and 329 IAC 3-21-6. Certification should be by both the owner or operator and by an independent registered professional engineer, stating that the facility has been closed in accordance with the specifications in the approved closure plan. The response must indicate the facility's desired future status. Mail a copy of **your** response and certification to:

Mr. Thomas E. Linson, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management
Department of Environmental Management
105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015

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APR 3 1989
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

In addition, Section 206 of the Hazardous and Solid Waste Amendments of 1984 (HSWA) requires that corrective actions be performed for all releases of hazardous waste or constituents from any solid waste management unit. The U.S. Environmental Protection Agency (U.S. EPA) has the authority to implement this provision. As you are aware, your company is subject to HSWA requirements.

For the purposes of this closure action any soil and/or ground water contamination around or beneath the RCRA units will be assumed to be from the adjacent plating room operations. Gross soil contamination from the plating room has been documented in the April 1988 and October 1988 RCRA Facility Investigation Work Plan and Quality Assurance Plan (RFI).

Currently the U.S. EPA, Region V, is reviewing Amphenol's RFI which includes provisions for soil sampling adjacent to and ground water monitoring down gradient of the RCRA units. The IDEM believes any soil and/or ground water contamination in these areas can and will be fully addressed in the 3008(h) corrective action process. Therefore, this modified closure plan only addresses pad and tank decontamination and not soil and/or ground water contamination in the vicinity.

If you wish to challenge this decision, IC 13-7-10-2.5 and IC 4-21.5-3-7 require that you file a Petition for Administration Review. If you seek to have the effectiveness of the closure plan stayed during Administrative Review, you must also file a Petition for Stay. The petition(s) must be submitted to the Commissioner at the above address within fifteen (15) days after your receipt of this notice. The petition(s) must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. Additionally, IC 13-7-10-2.5 requires that a Petition for Administrative Review must include:

1. The name and address of the person making the request.
2. The interest of the person making the request.
3. Identification of any persons represented by the person making the request.
4. The reasons, with particularity, for the request.
5. The issues, with particularity, proposed for consideration at the hearing.
6. Identification of the terms of the closure plan which, in the judgement of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing licenses of the type granted or denied by the Commissioner.

Mr. S. S. Waldo
Page 3

Please direct all questions regarding the closure process to Mr. John P. Maher of my office at AC 317/232-4534.

Sincerely,

Bruce H. Palin

Bruce H. Palin
Acting Assistant Commissioner for
Solid and Hazardous Waste Management

JPM/bja

Enclosures

cc: Mr. Hak Cho, U.S. EPA, Region V (with enclosure)
Ms. Fayola Wright, U.S. EPA, Region V
Johnson County Health Department (with enclosure)
Mr. Jeff Stevens
Ms. Ruth Williams (with enclosure)
Mr. Dennis Zawodni (with enclosure)
Ms. Catherine Lynch
Mr. Jim Hunt (with enclosure)

FILE



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

VIA CERTIFIED MAIL - P652-575-112

Mr. S. S. Waldo, Director
Environmental Affairs
Amphenol Corporation
358 Hall Avenue
P.O. Box 304
Wallingford, Connecticut 06492-0384

February 28, 1989

Re: Notice of Deficiency
Amphenol (Bendix)
Franklin, Indiana
IND 044587848

RECEIVED
MAR 02 1989

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Dear Mr. Waldo:

Staff of the Indiana Department of Environmental Management (IDEM) has reviewed the response to the November 18, 1988, Closure Plan, Notice of Deficiency and has found it to be inadequate for approval. As was discussed with Mr. John Maher of my staff by phone on February 10, 1989, a treatment, storage or disposal facility (TSD) must go through closure before the facility's status can be changed. A hazardous waste TSD unit is not considered closed until all requirements pursuant to 329 IAC 3-21 are met. These requirements include, but are not limited, to the following steps:

1. The owner/operator submits a closure plan and has it approved by the IDEM.
2. The owner/operator implements the steps outlined in the approved closure plan.
3. The owner/operator, along with an independent registered professional engineer, submits certification stating that closure was performed in accordance with the approved closure plan.
4. The IDEM acknowledges the receipt of certification and the Part A is amended accordingly.

In order to change the facility from a TSD to a nonhandler, the facility must be closed pursuant to the requirements in 329 IAC 3-21 and all hazardous wastes, hazardous residuals, and releases associated with the RCRA regulated units must be addressed. The IDEM does not wish to overlap or conflict with the U.S. Environmental Protection Agency's ongoing corrective action. However, this office will consider the impact of corrective action during the closure plan review process.

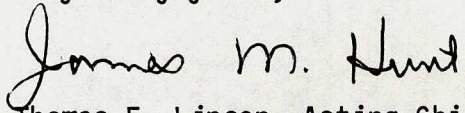
Page -2-
Mr. S. S. Waldo

In Title 40 of the Code of Federal Regulations (CFR), Parts 265.112(a)(4)(c) and 265.115 and as published in the May 19, 1980, Federal Register, owner/operators of TSDs are clearly required to submit closure plans for approval and both owner/operator and an independent engineer must submit certification that the unit(s) was closed in accordance with the approved closure plan. If it is not possible for you to obtain certification for your facility for the February 1984 decontamination, revise the closure plan to state how the tank and pad will be redecontaminated.

The attached Notice of Deficiency identifies those areas which still need to be addressed before the closure plan can be approved. Enclosed is a draft copy of IDEM's "Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities" to use as guidance in preparing a revised closure plan. Please submit five (5) copies of a revised closure plan to the IDEM within fifteen (15) days of the date of this letter.

If you have any questions regarding this matter, please contact Mr. John P. Maher at AC 317/232-4534.

Very truly yours,


Thomas E. Linson, Acting Chief *for TEL*
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

Enclosure

JPM/dj

cc: Mr. Hak Cho, U.S. EPA, Region V (with enclosure)
Ms. Fay Wright, U.S. EPA, Region V
Mr. Marc A. Herdrich, IDEM (with enclosure)
Mr. John Bonsett, Johnson County Health Department (with enclosure)
Ms. Ruth Williams, IDEM (with enclosure)

NOTICE OF DEFICIENCY

Closure Plan
Amphenol
Franklin, Indiana
IND 044587848
February 1989

1. Include a detailed schedule of closure activities still to be performed. Also, include a certification date.
2. Include a closure cost estimate for the remaining closure activities as required by 329 IAC 3-22-3. Estimates are to be based on a third party closing the facility.
3. State that the owner and an independent registered engineer will submit a certification of closure as required by 329 IAC 3-21-6.
4. If redecontamination is necessary, state that the pad will be washed and triple rinsed with a high pressure cleaner. The pad should be bermed before decontamination to contain the rinsate. The final rinsate must be analyzed for the parameters of concern (cyanide and total metals) using methods in the most recent version of the U.S. EPA's SW-846 Document (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods) to determine the effectiveness of the decontamination. The wash/rinse procedure shall be repeated until the metals are below Drinking Water Standards (MCLs) and the cyanides are below EPA Ambient Water Quality Criteria (WQC).
5. Combine the August 1987, closure plan, your December 14, 1988, responses to closure plan deficiencies, your response to the above deficiencies, and all applicable portions of the RCRA Facility Investigation (RFI) Work Plan and Quality Assurance Plan (April and October 1988) into one comprehensive closure plan document.
6. Correct the discrepancies between the location of the RCRA container storage area given in the closure plan and the RFI.
7. Provide documentation of liability coverage for sudden accidental occurrences as required by 329 IAC 3-22-24(a).
8. State all analytical methods that were used or will be used in closing the RCRA units. If applicable, explain and justify any deviations from standard methods.

AMPHENOL corporation

an *LPL* company

(203) 265-8500

December 14, 1988

CERTIFIED MAIL
RETURN RECEIPT

RECEIVED
DEC 16 1988

OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Thomas L. Russell, Chief
Hazardous Waste Management Branch
Indiana Department of Environmental Management
105 South Meridian Street
P.O. Box 6015
Indianapolis, IN 46206-6015

Re: Notice of Deficiency
Amphenol Corporation
Franklin Indiana
IND 044587848

Dear Mr. Russell:

I am in receipt of your letter of November 18, 1988 concerning deficiencies in the closure documents submitted to the Indiana Department of Environmental Management (IDEM) for the subject facility. In reviewing the comments made by your staff, I have become quite concerned over what appear to be basic misunderstandings about the current status of the facility and past actions undertaken as part of the facility closure. Before responding to the individual deficiencies noted, a chronological overview of prior activities at our Franklin facility is appropriate.

The facility at Franklin was purchased by Bendix Corporation from Dage Electric, Inc. in 1963. Electrical connectors were manufactured at the facility until its closure in December 1983. Operations performed at the plant included plating, metal working, painting and degreasing.

On August 12, 1980, Bendix submitted a Resource Conservation and Recovery Act (RCRA) Part A application for the site in anticipation of the implementation of RCRA regulations in November 1980. That application (Attachment 1) noted a proposed wastewater pretreatment facility and a fenced, drum storage area located on the west side of the building outside the plate shop located in the southwest corner of the building. Another fenced storage area was also located on the west side of the building. This area was not used for hazardous waste storage but for storage of virgin oils and scrap, recyclable metals. The RCRA Part A application did not identify this area as a hazardous waste storage area.

In May 1981, a closure plan was written for the facility (Attachment 2). There is no indication that this plan was submitted to the United States Environmental Protection Agency (EPA) or IDEM for review, nor is it clear that regulations in place at the time required agency review.

In late 1981 to early 1982, the wastewater pretreatment facility was constructed. In conjunction with that construction, the fenced area where hazardous wastes were actually stored was removed and replaced by an enclosed building. All hazardous wastes were subsequently stored in that building.

In 1983 the Bendix Corporation was acquired as a wholly-owned subsidiary by Allied Corporation. As part of this consolidation, a decision was made to close the operation. Manufacturing ceased in December 1983. Closure activities on RCRA units were performed during February 1984 (as described in Amphenol's August 4, 1987 submittal.)

In preparing the building for sale, Allied initiated actions during 1984 to evaluate potential subsurface contamination under the plating room. This evaluation was subsequently expanded to include an evaluation of potential groundwater contamination on the site. The excavation of cyanide contaminated soils under the plate shop, replacement of the broken sewer line at the plant, and detection of groundwater contamination on the site have been well documented. On May 21, 1984 a Superfund 103(c) Site Notification (Attachment 3) was submitted to EPA outlining the initial findings of contamination.

In December 1986 Allied Corporation established Amphenol Corporation as a wholly owned subsidiary. Amphenol agreed to assume all liabilities of the former Amphenol Products Division including certain environmental liabilities at the former Bendix operation in Franklin. On June 2, 1987, the business and assets of Amphenol Corporation were acquired through a stock merger by LPL Investment Group Inc. Assumption of the environmental liabilities at Franklin by Amphenol was continued through this merger.

By letter dated June 30, 1986, IDEM advised Amphenol that the EPA was responsible for RCRA corrective actions. Subsequently, by letter dated October 30, 1986, EPA advised Amphenol that corrective measures would be required pursuant to Section 3008(h) of HSWA. Since that time negotiations have continued to enter into a consent agreement with EPA. Concurrently, Amphenol has prepared and submitted a RCRA Facility Investigation (RFI) Work Plan to EPA for review and approval. A copy of the work plan along with modifications made as a result of EPA comments has been submitted to IDEM also. It is our current understanding that EPA is now in a position to approve the work plan.

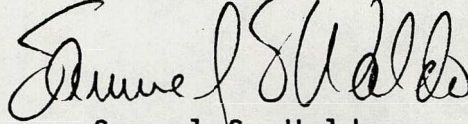
On June 25, 1987, IDEM notified Amphenol that it was in violation of RCRA and 320 IAC4.1 for failure to submit a closure plan. By letter dated August 4, 1987, Amphenol responded with a plan which was a retrospective description of closure activities which took place three years previously in February 1984. It was our contention then, and remains our position now, that all RCRA units were closed pursuant to standards extant at the time and that no further closure activities are necessary or warranted. The EPA 3008(h) action has no bearing on RCRA closure in that it addresses remediation of past releases, which Amphenol continues to believe occurred prior to RCRA and from normal operations over a long period of time.

page 3

Given the above, we believe that a closure plan which presupposes additional closure activities or which is reviewed against current standards for actions taken almost 5 years ago is inappropriate. Irrespective of the above, I have attached a point by point response to the deficiencies noted in your November 18, 1988 letter (Attachment 4).

I am quite concerned that the actions requested by IDEM and EPA are overlapping and conflicting with one another. If you believe it to be beneficial, I am quite willing to meet and discuss these issues. Please contact me at (203) 265-8760.

Sincerely,



Samuel S. Waldo
Director,
Environmental Affairs

enclosures

cc: W. Buller - Reg V-USEPA
J. Robacynski

SSW/dld:
a:defici



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

FILE
RECEIVED
NOV 21 1988
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

November 18, 1988

Mr. S. S. Waldo, Director
Environmental Affairs
Amphenol Corporation
358 Hall Avenue
P.O. Box 304
Wallingford, Connecticut 06492-0384

Re: Completeness Notice of Deficiency
Amphenol (Bendix)
Franklin, Indiana
IND 044587848

Dear Mr. Waldo:

Staff has performed a completeness review on the facility closure documents (closure plan dated August 1987, and Resource Conservation and Recovery Act (RCRA) Facility Investigation Work Plan and Quality Assurance Plan dated April 1988) and found them inadequate for approval. The enclosed "Closure Plan Deficiencies" identifies those areas which need to be addressed. Please submit a revised closure plan within thirty (30) days of the date of this letter.

If you have any questions regarding this matter, please contact Mr. John P. Maher at AC 317/232-4534 or Ms. Jill Stevens at AC 317/232-3243.

Very truly yours,

Thomas L. Russell

Thomas L. Russell, Chief
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

JPM/tjd

Enclosure

cc: Mr. Hak Cho, U.S. EPA, Region V
Mr. Bernie Orenstein, U.S. EPA, Region V
Mr. John Bonsett, Johnson County Health Department

Closure Plan Deficiencies
Amphenol
Franklin, Indiana
IND 044587848

1. Include a detailed schedule of closure activities including certification.
2. Include a closure cost estimate for the remaining closure activities as requested by 329 IAC 3-22-3. Estimates are to be based on a third party closing the facility.
3. State that the owner and an independent registered engineer will submit a certification of closure within sixty (60) days of completion as required by 329 IAC 3-21-6.
4. All the analytical methods in Table 7 except those for amendable cyanide are labeled "CLP SOW July 1987" (Contract Laboratory Program State of Work July 1987). If these methods correspond to standard methods, those methods should be referenced. If they are based on standard methods, those methods should be referenced and deviations explained. If they are unique to the laboratory, the full method should be described.
5. The accepted cleanup standard for organics is the detection limit, for inorganics and metals background, clean water standards or detection limits are acceptable. Health or risk based standards may be used pending review and approval of such proposals by the Indiana Department of Environmental Management (IDEM). Approval of any health or risk based standard must be granted before the IDEM will accept certification of closure.

The site specific cleanup level proposal must document that the contaminants left in the soil will not adversely impact any environmental media (ground water, surface water, or atmosphere) and that direct contact through dermal exposure, inhalation, or ingestion will not result in a threat to human health or the environment. (See 52 FR 8706, March 19, 1987, for demonstration references).

6. Provide documentation of liability coverage for sudden accidental occurrences as required by 329 IAC 3-22-24(a).
7. Provide a detailed description of the container storage area, including dimensions. Information in other portions of the file indicate the pad is only partially curbed and the concrete is cracked in places.
8. The soil sampling and analysis program shall include soils directly beneath cracks and those areas around the edge of the pad that were most susceptible to run-off and/or spills. Explain how the number and locations of the samples were determined.

9. Describe what procedures, if any, were used to contain wash and rinse solutions during decontamination.
10. Discuss in detail what actions will be taken if contamination is found under or near the storage area.
11. Provide a detailed description of the tank and appurtenances. Include materials of construction, age and details of any known releases.
12. Include documentation showing that a tank tightness/leak/integrity test has been performed or state that such a test will be conducted within the closure time frames.
13. Discuss in detail what actions will be taken if contamination is found around the tank.
14. Discuss the future use of the tank.
15. Combine the 1987 closure, the deficiencies addressed above, and the applicable portions of the RCRA Facility Investigation Work Plan and Quality Assurance Plan (April and October 1988) into one comprehensive closure plan document.

STATE OF INDIANA



INDIANAPOLIS

STATE BOARD OF HEALTH

AN EQUAL OPPORTUNITY EMPLOYER

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P. O. Box 1964
Indianapolis, IN 46206-1964

Mr. Hak C. Cho
U.S. EPA, Region V
230 South Dearborn Street
Chicago, IL 60604

RECEIVED

May 10, 1985

SOLID WASTE BRANCH
U.S. EPA, REGION V

Dear Mr. Cho:

Re: Guidance Request
Bendix (Allied Corporation)
Franklin, Indiana
IND 044587848

On March 7, 1985, Mr. Terry Gray of this office was told by Mr. Kenneth Burch of your agency and yourself that the proper way to address the changes mandated by the Hazardous and Solid Waste Amendments of 1984 would be to send facility specific letters to EPA for guidance. This letter is a request for guidance for the above-referenced facility.

Ms. Maggi M. Mogollon of the Plan Review and Permit Section is working with the facility and has prepared the following summary of the facility's permitting and closure history:

Brief Summary

Bendix Corporation in Franklin, Indiana, is classified as G/TSD under S01 and S02 process codes on the current Part A permit. In this case, S02 refers to an underground tank storage. The expected date of closure given in the State permit is June 1, 2006. This office has recently received information indicating that the facility is undergoing closure activities. Ms. Karyl Schmidt of this office met with the facility representative in the early summer of 1984 and received facility groundwater monitoring reports at that time. According to our information, soil and groundwater contamination has been found on the plant site. This office has not received a written request for closure from the facility representative. The most recent manifest in our file is dated April 5, 1984, for the F006 waste stream. Enclosed are copies of the pertinent reports and correspondence.

Please advise what type of closure/post-closure activities the State can administer and how these will relate to the requirements of the Hazardous and Solid Waste Amendments of 1984. Also, what type of actions will be required from the EPA. Your prompt reply to this request would be appreciated, since our actions will depend on your written guidance. Please direct your response and/or questions to Ms. Maggi M. Mogollon at AC 317/243-5090.

Very truly yours,

Guinn Doyle *by TR*

Guinn Doyle, Chief
Hazardous Waste Management Branch
Division of Land Pollution Control

MMM/tr

Enclosures

cc: Mr. Kenneth Burch, U.S. EPA, Region V

Ms. Sally K. Swanson, U.S. EPA, Region V

TELEPHONE CALL REPORT

Date 4/24/85Time 4:20 pmFrom: Robert CarterTo: M. McGillonWater Pollution ControlLand Pollution ControlSubject Discussed Bendix Corp. - Franklin, IndianaSummary

Mr. Carter said that ground-water contamination at the Franklin plant originated from leaks in the plating room and from within the waste-water treatment system on-site, and not directly from the hazardous waste storage area. He, therefore, feels that clean-up and closure of this contamination is not under RCRA jurisdiction because they are regulated under RCRA as a storage facility, not a disposal facility.

Action RequiredDetailsFile in County Johnson

STATE BOARD OF HEALTH

INDIANAPOLIS

OFFICE MEMORANDUM

3
Steele
FEB 22 2 30 PM '85
DATE: February 21, 1985
DIV. OF LAND & WATER CONTROL
STATE BOARD OF HEALTH

THRU:

RECEIVED

MAY 13 1985

SOLID WASTE BRANCH
U.S. EPA, REGION V

TO: Earl A. Bohner

FROM: L. Robert Carter *LRC*

SUBJECT: Possible Groundwater Contamination
Bendix (Allied Corporation), Franklin

A few months ago, we were contacted by officials of the above company, stating that following the close of the plant at Franklin and prior to attempting to sell the plant, they conducted an environment study and found the following:

1. Gross contamination of soil by cyanide and volatile organic compounds (TCE and PCE) beneath the floor of the plating room.
2. High (1,000-70,000 ppb) total VOCs in shallow groundwater on the plant site, particularly along the plant sewer line.

They had just gotten preliminary data from their consultant, ATEC, and informed us that they would proceed to do further studies and propose remedial action.

I met with company representatives again at the Johnson County Health Department on February 14, 1985, at the request of John Bonsett, Sanitarian. Jay Schutt and Jim Morris of the Indiana Cities Water Corporation were also present, as they own the water utility in Franklin.

Allied Corporation has hired a new consultant, IT Corporation of Pittsburgh, as they believe the integrity of work done by ATEC may have been compromised by drilling, sampling, or analytical procedures.

The company is proposing and will implement removal of cyanide-contaminated soil down to 10 ppm and dispose of it at Adams Center Landfill, Fort Wayne (500 cu. yd. or 25 truckloads). They will then apply a chlorine solution to the remainder to change the cyanide to cyanate, a nontoxic form. This removal and treatment of cyanide is to preclude the possibility of a future owner spilling sulfuric acid which would react to form hydrogen cyanide gas causing a risk to workers.

As far as can be determined so far, the area is served by ICWC and no private wells exist in the immediate vicinity. However, this will continue to be checked out by the health department and the water company.

Even though the ICWC wells are 3/4 mile ENE from Bendix and are upgradient, it is possible that the radius of the cone of depression extends to the Bendix property (the water company has in the past drawn caustic leachate from a pond of a former tomato cannery just east of Bendix).

The water company recently analyzed their production system and found cyanide in the wells ranging from 105 to 473 ppb, with 32 ppb in the finished water. Their wells are 100 feet deep in a sandy aquifer extending up to within about eight feet of the ground surface. The dynamic water level is 43 feet. No VOCs were detected.

Whether or not the Bendix site is the source of the cyanide remains to be seen. One would expect to find VOCs as well. However, off-site migration is to be studied by Bendix.

There is no drinking water standard for cyanide, but the concentrations in the water are deemed to present no health risk. However, additional reduction could be accomplished fairly easily by pH adjustment.

We took split samples of the ICWC wells on February 15 for cyanide. We will sample for VOCs later, as some of the lab's equipment was down at the time.

I believe the situation is well in hand at this point. Allied Corporation appears to be willing and able to do whatever is necessary as determined by state and local authorities and is approaching the matter in a very professional, scientific, and environmentally sound manner. We will keep on top of this.

LRC/bt

cc: Mr. Ralph C. Pickard
Mr. Arnold J. Viere
Mr. Joseph C. Stallsmith
Ms. Jacqueline Strecker✓
Mr. Jeff Eads

15

JOHNSON COUNTY HEALTH DEPARTMENT

86 West 6th Street — Court House Annex

Franklin, Indiana 46131

736-3770

FEB 4 2 30 PM '85
DIV. OF LAND POLLUTION CONTROL
STATE BOARD OF HEALTH

January 30, 1985

Mr. Robert Carter
Room 329
Indiana State Board of Health
1330 W. Michigan Street
Indianapolis, In. 46206

On January 23, 1985 the Johnson County Health Department was advised by Mr. Dennis Zurakowski, a representative of the Allied Corporation in New York, that a chemical spill evaluation and cleanup activity was underway within the city of Franklin, Indiana. The reason for this activity was the result of past mishandling of organic chemicals at the Bendix Company.

According to Mr. Zurakowski, a chemical plume has been identified in the groundwater near the Franklin Bendix facility. The path of this plume is being evaluated and recovery of the contaminants are under investigation. Mr. Zurakowski has agreed to provide detailed information on this investigation to the Johnson County Health Department.

The Johnson County Health Department is concerned that it was only recently that we were advised of this environmental hazard. It would have seemed appropriate for the Indiana State Board of Health to notify the local health department of this potentially hazardous situation when the problem was first uncovered. Perhaps there was no legal requirement for the Indiana State Board of Health to notify the local health department, but this lack of notification appears to represent a breach of protocol between the two health agencies.

Since our notification, this department has advised the Indiana Cities Water Corporation of this situation. The water utility has indicated that additional chemical analysis on their water will be conducted. Further, we are attempting to locate private wells in the identified affected area.

A major municipal well field is located approximately 3500 feet from this chemical spill site. To add to our concern, this area is on a well drained soil formed in loamy outwash over stratified gravelly sand. Geologically, it would appear that the opportunity for chemical migration through the soil is considerable.

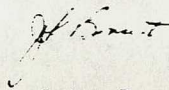
This office hopes that this environmental hazard will be of only minor significance. The Johnson County Board of Health desires to provide a prompt and professional service to the citizens of our community. This service cannot be provided without full cooperation from the State health agency.

The Johnson County Health Department welcomes your suggestion that a joint meeting be held at Franklin between officials from Bendix (now under the title of the Allied Corporation), the Indiana Cities Water Company, as well as the state and local health personnel. By meeting together, we will have a better opportunity to understand this situation.

The Johnson County Health Department would be happy to host this meeting. If you can contact the appropriate representatives from the Bendix Corporation, I will notify the Indiana Cities Water Utility and reserve our conference room for whatever date is convenient to your schedule.

I thank you for returning my call and bringing me up to date on this environmental problem. Your anticipated assistance and co-operation in this regard is appreciated.

Yours truly,



John Bonsett
Dir. of Environmental Health

JB/reh

cc: Wm. D. Province, M. D., Johnson Co. Health Officer
Jim Walsh, Indiana Cities Water
Karyl Schmidt, Land Pollution, In. St. Bd. of Health
Dennis Zurakowski, Allied Corporation

Henry J Mitchell
Manager, Facilities Engineering

Bendix

**Electrical
Components
Division**

5000 ...
Tel: ...

Edmund A. Giebel
Director
Pollution Control

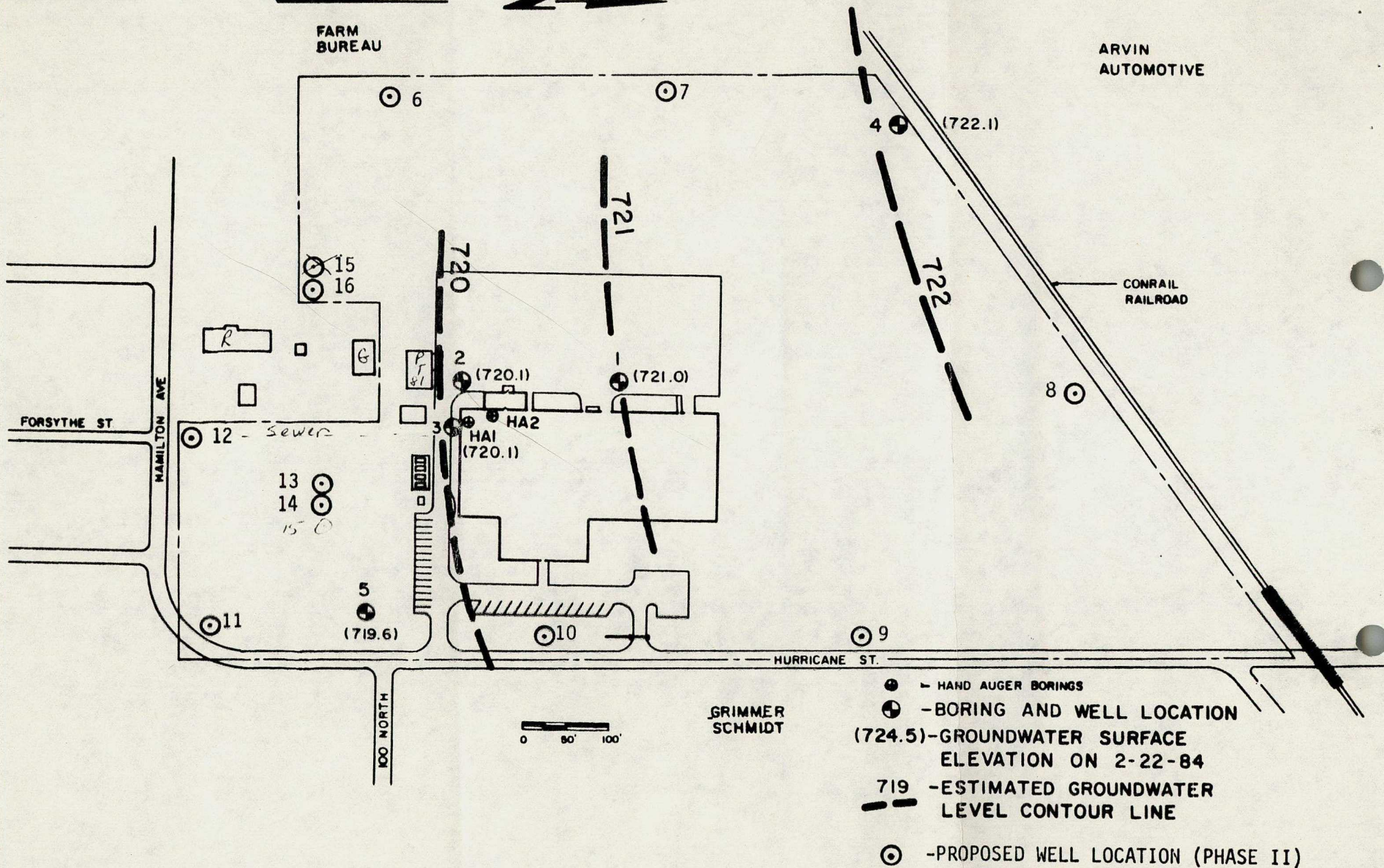


Allied Corporation
P.O. Box 1013R
Morristown, New Jersey 07960
(201) 455-6569

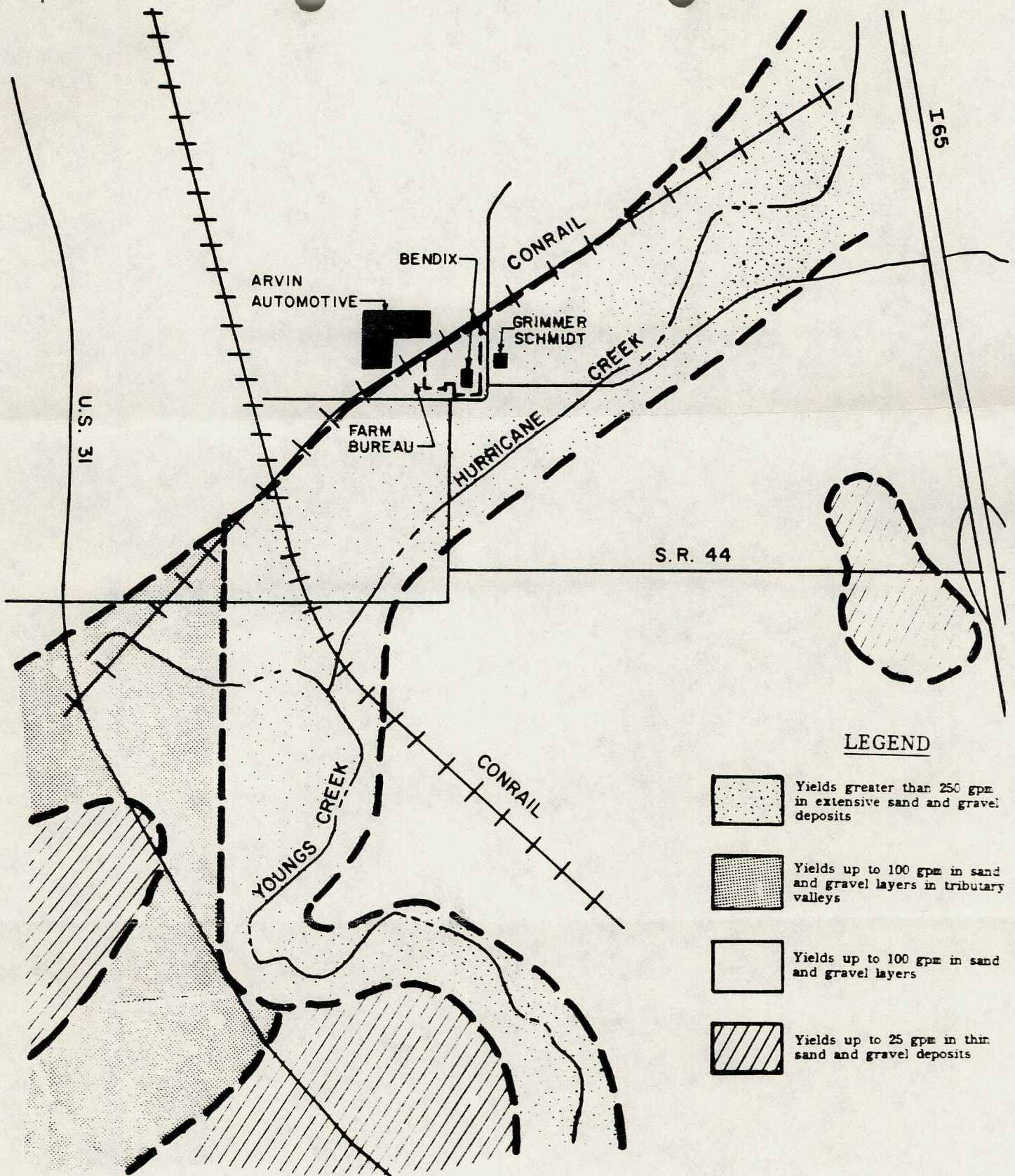
*Early Summer 1984
met with Karyl Schmidt;
Geology Section
Division of Land Pollution Control*

FARM
BUREAU

ARVIN
AUTOMOTIVE



ATEC ASSOCIATES



-After Uhl (1966)

Groundwater Availability in the Vicinity of Franklin, Indiana

Table 2. EP Toxicity Metal Concentrations, Total Cyanides, and pH of Soil Samples

Parameter	Maximum Concentration EP Toxicity ^c mg/l	Depth: 3.5 - 5.0 ft			Depth: 8.5 - 10.0 ft			Depth: 13.5 - 15.0 ft			Depth: 0.5 - 1.0 ft		Depth: 1.5 - 2.0 ft	
		B-1	B-2	B-3	B-1	B-2	B-3	B-1	B-2	B-3	HA-1	HA-2	HA-1	HA-2
<u>EP Toxicity</u>														
Arsenic	5.0	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.4
Barium	100.0	0.2	≤ 0.1	0.1	0.3	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	0.4	0.2	≤ 0.1	0.5
Cadmium	1.0	≤ 0.01	≤ 0.01	≤ 0.01	0.03	0.02	≤ 0.01	0.02	≤ 0.01	0.05	≤ 0.01	≤ 0.01	0.11	≤ 0.01
Chromium	5.0	≤ 0.01	≤ 0.01	0.01	0.02	0.01	0.03	0.02	0.01	0.04	0.03	0.01	0.03	0.02
Lead	5.0	≤ 0.01	≤ 0.1	≤ 0.1	0.2	≤ 0.1	≤ 0.1	0.1	≤ 0.1	0.4	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
Mercury	0.2	≤ 0.0005	≤ 0.0005	≤ 0.0005	≤ 0.0005	≤ 0.0005	≤ 0.0010	≤ 0.0005	≤ 0.0005	≤ 0.0010	≤ 0.0010	≤ 0.0005	≤ 0.0010	≤ 0.0005
Selenium	1.0	≤ 0.5	≤ 0.05	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
Silver	5.0	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	0.02	≤ 0.01	≤ 0.01	0.01	0.03	0.02	0.03	≤ 0.01
<u>Reactivity</u>														
Cyanide ^a		≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	≤ 0.25	2.5	266	0.8	60
Cyanide aq. ext. ^a		≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	3.3	≤ 0.5	3.0
<u>Corrosivity</u>														
pH		6.5	6.3	7.7	8.3	8.2	8.6	8.4	8.7	8.6	9.8	6.7	9.0	7.6
Total Solids ^b		85	85	86	95	93	94	89	91	90	91	90	96	93

^aTotal cyanides, concentration in micrograms per gram

^bIn percent

^c40 CFR 261.25, Table 1

Note:

Soil Samples were obtained on the following dates:

B-1, B-2 (2/9/84); B-3 (2/8/84); HA-1 (2/10/84); HA-2 (2/13/84)

Table 3. Summary of Concentrations of Volatile Organic Priority Pollutants Detected in Selected Soil Samples Obtained From Test Borings^a

Parameter	Depth: 3.5 - 5.0 ft			Depth: 8.5 - 10.0 ft			Depth: 13.5 - 15.0 ft			Depth: 0.5 - 1.0 ft		Depth: 1.5 - 2.0 ft	
	B-1	B-2	B-3	B-1	B-2	B-3	B-1	B-2	B-3	HA-1	HA-2	HA-1	HA-2
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	29	ND	ND	76
Chlorobenzene	ND	ND	52	ND	ND	ND	ND	ND	ND	ND	21	19	ND
1,1,1, Trichloroethane	140	ND	ND	ND	ND	ND	ND	44	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	24	ND	ND	ND	ND	ND	ND	ND	83	35	85
Methylene Chloride	88	160	ND	91	640	63	ND	150	130	180	ND	130	ND
Tetrachloroethylene	4800	1300	2500	3400	5700	4100	1600	4900	6700	735	36,300	850	400
Toluene	ND	ND	63	ND	ND	ND	ND	ND	ND	25	46	ND	22
Trichloroethylene	ND	ND	19,600	ND	900	88	1700	920	130	780	880	1000	530

^aAll concentrations in parts per billion (ppb)

ND = Not detectable at the concentrations noted in the test data contained in Appendix D

Note

Soil Samples were obtained on the following dates:

B-1, B-2 (2/9/84); B-3 (2/8/84); HA-1 (2/10/84); HA-2 (2/13/84)

Table 4. Summary of Field and Laboratory Groundwater Temperature, pH, and Conductivity Readings

Well No.	Field Measurements ^a				Laboratory Measurements ^b	
	S-C-T Meter		YSI Meter		pH	Conductivity
	Temperature °C	pH ^c	Temperature °C	Conductivity ^c μ mho/cm		
1	11.5	5.4	12.5	1410	7.4	800
2	12.8	6.5	13.0	1110	7.6	700
3	14.2	6.8	14.0	800	7.6	600
4	11.5	5.8	11.0	370	7.4	700
5	13.6	6.7	13.5	1100	d	d

^a Readings were obtained in well casing prior to the collection of the groundwater samples

^b Measurements made on groundwater samples obtained on February 22, 1984

^c Already adjusted for temperature by instrument

^d Groundwater sample not obtained for laboratory analysis

Table 5. Summary of Water Quality Test Results on the Groundwater Samples Obtained on February 22, 1984^a

Parameter	Well No. 1	Well No. 2	Well No. 3	Well No. 4 ^d
<u>Primary</u>				
Arsenic	≤0.03	≤0.01	≤0.01	≤0.01
Cadmium	≤0.01	≤0.01	≤0.01	≤0.1
Chromium	0.01	≤0.01	0.02	0.02
Lead	≤0.1	≤0.1	≤0.1	<0.1
Mercury	≤0.0005	≤0.0005	≤0.0005	≤0.0005
Nitrate (As N)	4.9	2.1	1.9	7.8
Selenium	≤0.02	≤0.02	≤0.02	≤0.03
Silver	≤0.01	≤0.01	≤0.01	≤0.01
Endrin ^c	<0.01	<0.01	<0.02	<0.02
Lindane ^c	<0.01	<0.01	<0.02	<0.02
Toxaphene ^c	<0.05	<0.05	<0.10	<0.10
<u>Secondary</u>				
Chloride	20	32	20	24
Copper	0.06	0.04	0.07	0.07
Iron	8.9	7.9	4.12	1.08
Sulfate	40	42	23	65
Zinc	0.072	0.084	0.089	0.083
pH	7.4	7.6	7.6	7.4
<u>Other</u>				
Antimony	0.01	0.01	0.1	0.1
Beryllium	0.01	0.01	0.01	0.01
Calcium	145	120	88	97
Magnesium	37.2	34.0	21.9	26.9
Nickel	0.08	0.15	0.05	0.05
Tin	1	1	1	1
Thallium	0.1	0.1	0.1	0.1
Hardness ^b	515	440	310	353

^a All concentrations in mg/l (parts per million)

^b Concentration in mg CaCO₃/liter

^c Concentrations based on GC/MS detection limits

^d Located hydraulically upgradient from facility

Table 6. Summary of Concentrations of Organic Chemicals
Detected in the Groundwater Samples
Obtained On February 22, 1984^a

<u>Parameter</u>	<u>Well No. B-1</u>	<u>Well No. B-2</u>	<u>Well No. B-3</u>	<u>Well No. B-4^b</u>
Ethylbenzene	6.0	5.8	12.2	ND
Tetrachloroethylene	3200	3200	640	611
Toluene	3.9	3.4	27	5.4
Trichloroethylene	160	5700	16,600	1040
Carbon Tetrachloride	ND	45	ND	ND
1,1,1 - Trichloroethane	ND	85	3700	ND
1,1 Dichloroethane	ND	7.8	42	ND
Chloroform	ND	1.7	ND	ND
Trans - 1,2-Dichloroethylene	ND	1.0	1.4	ND
Chlorobenzene	ND	ND	4.3	ND

^aAll concentrations in parts per billion (ppb)

^bLocated hydraulically upgradient from facility

ND = Not detectable at the concentrations noted in the test data contained in
Appendix C